quite so densely strigose; the intermediate tibiæ are more distinctly curved at the base, and the posterior tibiæ are not toothed externally, but are swollen in a most remarkable manner just below the base and then gradually narrowed to the apex.

Long. 11 lin. Hab. Angola.

BIBLIOGRAPHICAL NOTICE.

The Geological Record for 1876. Svo. Pp. xxii and 415. London : Taylor and Francis, 1878.

THE study of Geology has been likened to geographical exploration, which bears small results unless the proved outcome of each traveller's work is duly recorded and compared with previous additions to our knowledge. It is not enough to have at hand the journals of travel, however carefully prepared. Comparative tables and indices for ready reference are necessary; so that observations, past and present, far and near, may be studied together,-so that slips and patches of mapped lands may be combined, scattered descriptions of parts of nations be brought together under one head, and the isolated accounts of various local products be made to supply a compendium of the natural history of one region. Besides a mere cataloguing of the names of places, peoples, and things, the geographer requires also condensed statements of matters of fact and inference, to aid in the construction of his compendious books, whether he has to prepare these abstracts or finds them made ready to his hand.

Thus also in Geology we have many useful catalogues of names of authors and books, and of fossils, rocks, and minerals. Some are in the form of dictionaries, some are regular bibliographical portions of periodical journals, some constitute appendices in books and memoirs, and some are published in an independent form. Some have succinct notices, descriptive or suggestive, attached to the subjects mentioned, and some carry much information in collateral columns, but many indicate nothing more than what the mere names and titles can suggest. Of those more completely useful works which assist the geologist in finding what has already been done and thought of in this or that department of his science, the 'Geological Record,' edited by Mr. Whitaker, F.G.S., with the assistance of many other good and energetic geologists and mineralogists, stands high in worth and favour. It has no rival except the excellent 'Revue de Géologie,' by MM. Delesse and Lapparent, which has reached its fourteenth annual volume, and worthily fulfils its useful mission among our fellow-labourers in France.

phical headings; 2. Physical Geology, as Phenomena of underground origin, Surface phenomena, and Rock-formation; 3. Applied and Economic Geology; 4. Petrology; 5. Mineralogy; 6. Palacontology, taking in order the Vertebrates, Invertebrates, and Plants; 7. Maps and Sections; 8. Miscellaneous and General; together with Supplements for 1874-6, a very valuable Index of new Species (rocks, minerals, and fossils), and, lastly, an excellent General Index. The long list of periodicals supplying memoirs and notices, treated of in abstract, occupies 14 pages. Numerous books, of course, are noticed in their respective places according to their subjects. Altogether the year 1876 has evidently produced a fair harvest of geological work; and the 'Record' may be likened to the reaper, binder, stacker, thresher, and winnower of the golden grain of knowledge, enabling some to compile new and valuable accumulations, others to use and digest excellent aliment for their intellectual progress, and others to sow chosen and most promising seed. in well prepared furrows, for the benefit of future students.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 6, 1878.—Henry Clifton Sorby, Esq., F.R.S., President, in the Chair.

The following communications were read :--

1. "On the Range of the Mammoth in Space and Time." By Prof. W. Boyd Dawkins, M.A., F.R.S., F.G.S.

The author expressed his opinion that the result of the evidence collected since the death of Dr. Falconer has been to establish the view of that palaeontologist as to the Mammoth having appeared in Britain before the Glacial epoch. The evidence as to the occurrence of the Mammoth in the south of England was first examined. The remains found beneath the bed of erratics near Pagham belonged, not to Elephas primigenius, but to E. antiquus. But in 1858 remains belonging to the former were found by Prof. Prestwich under Boulder-clay in Hertfordshire. In Scotland remains of E. primigenius have been found under Boulder-clay; but whether under the oldest Boulder-elay is uncertain. In 1878 a portion of a molar was brought up from a depth of 65 feet near Northwich; it was in a sand beneath Boulder-clay, which the author considered to be undoubtedly the older Boulder-clay. The author now assents to Dr. Falconer's opinion (which he formerly doubted) that E. primigenius was a member of the Cromer Forest-bed fauna. It is also clear that it was living in the southern and central parts of England in Postglacial times. It has not been found north of Yorkshire on the east, and Holyhead on the west, probably because Scotland and Northwest England were long occupied by glaciers. Its remains have